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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/261,197	03/03/1999	BRIAN E. MCBRIDE	53921/56	7444

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TORONTO,
CANADA

EXAMINER

STEVENS, ROBERTA A

ART UNIT	PAPER NUMBER
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2665

DATE MAILED: 05/20/2004

15

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/261,197

Applicant(s)

MCBRIDE, BRIAN E.

Examiner

Roberta A Stevens

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-10,12,13,15-37,39,40 and 43-50 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1,3-10,12,13,15-37,39,40 and 43-49 is/are rejected.
- 7) ☒ Claim(s) 50 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Amendment

1. The amendment filed March 4, 2004 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: On page 7 of the specification after line 6: **“Referring to figure 2.....x-axis.”**

2. Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1, 6, 8, 10, 13, 18, 20, 22, 33, 44 and 45 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The limitation, **one traffic stream of the plurality of traffic streams has a phase delay having a granularity in time units which is finer in granularity than time units of a transmission rate associated with the one traffic stream** is not support by the specification.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 3, 5-10, 12, 13, 15, 17-23, 24-33, 34-37, 39, 40 and 43-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hiltner (U.S. 5119368) in view of Pawelski (U.S. 6307869 B1).

7. Regarding claims 1 and 6, Hiltner teaches (figure 1, 3-4 and 6-8) a method and apparatus for generating digital traffic for use in testing a multi-port communications device comprising: generating a reference pattern defining the digital traffic and generating a plurality of traffic streams from the reference pattern, whereby the plural traffic streams are used for loading respective input ports of the communications device; and introducing a plurality of phase delays among the plurality of traffic streams when compared to the reference digital traffic pattern.

8. Hiltner does not specifically teach one traffic stream of the plurality of traffic streams has a phase delay having granularity in time units. However Hiltner does teach (figure 9) a delay line (901) having a propagation length of one time slot (time unit).

9. Pawelski teaches (column 1, lines 25-29) the difference in distance (line delay) creates a phase delay. It would have been obvious to one of ordinary skill in this art to adapt Pawelski's phase delay to Hiltner's system to maintain synchronism or clock recovery in the system.

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10. Regarding claim 3, 7, 9, 12, 15, 19 and 21, Hiltner teaches (figure 4) the communication device effects statistical multiplexing amongst the plurality of traffic streams

11. Regarding claims 4 and 16, Hiltner teaches (figure 4) the traffic streams are continuous digital data.

12. Regarding claims 5, 17, 31-32, 37 and 43, Hiltner teaches (column 2, line 59 –68) the plurality of traffic streams are ATM.

13. Regarding claims 8 and 18, Hiltner teaches (figures 1 and 7-9) an apparatus and method for loading a multi-port communication device with digital traffic, comprising: generating from a digital traffic stream a plurality of digital traffic streams having identical data content thereto; and providing the plurality of digital traffic streams with a plurality of phase delays there between to input ports of the communication device each phase delay (line delay) being related to a buffer length and a transmission rate associated with the traffic (figure 4).

14. Hiltner does not specifically teach a phase delay having a granularity in time units. However Hiltner does teach (figure 9) a delay line (901) having a propagation length of one time slot (time unit).

15. Pawelski teaches (column 1, lines 25-29) the difference in distance (line delay) creates a phase delay. It would have been obvious to one of ordinary skill in this art to adapt Pawelski's phase delay to Hiltner's system to maintain synchronism or clock recovery in the system.

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16. Regarding claim 10 and 13, Hiltner teaches (figures 1 and 7-9) an apparatus and method for operating a digital traffic replicating device for use in testing a multi-port communication device, comprising: receiving an input digital traffic streams; and generating a plurality of output digital stream from the input digital traffic streams, wherein a phase delay is introduced to at least one of the plurality of output digital traffic streams; and wherein the plurality of output digital traffic stream have traffic patterns which are replicas of the input digital traffic streams each phase delay (line delay) being related to a buffer length and a transmission rate associated with the traffic (figure 4).

17. Hiltner does not specifically teach a phase delay having a granularity in time units. However Hiltner does teach (figure 9) a delay line (901) having a propagation length of one time slot (time unit).

18. Pawelski teaches (column 1, lines 25-29) the difference in distance (line delay) creates a phase delay. It would have been obvious to one of ordinary skill in this art to adapt Pawelski's phase delay to Hiltner's system to maintain synchronism or clock recovery in the system.

19. Regarding claim 20, Hiltner teaches (figures 1 and 7-9) an apparatus for loading a multi-port communications device with digital traffic, comprising: means for generating from a digital traffic stream a plurality of digital traffic streams having identical data thereto; and means for providing the plurality of digital traffic streams to input ports of the communication device with a phase delay introduced to at least one of the plurality of digital traffic streams being. Determined from a buffer length and a transmission rate associated with the traffic.

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20. Hiltner does not specifically teach a phase delay having a granularity in time units.

However Hiltner does teach (figure 9) a delay line (901) having a propagation length of one time slot (time unit).

21. Pawelski teaches (column 1, lines 25-29) the difference in distance (line delay) creates a phase delay. It would have been obvious to one of ordinary skill in this art to adapt Pawelski's phase delay to Hiltner's system to maintain synchronism or clock recovery in the system.

22. Regarding claim 22 and 44, Hiltner teaches (figures 1 and 7-9) a digital data stream replicating device, comprising: an input port for receiving an input continuous digital data stream comprising input data blocks at an input transmission rate; broadcast means for replicating the input continuous digital data stream into N streams of replicated continuous digital data streams; N output ports for transmitting the plurality of replicated continuous data streams at output transmission rates, each output transmission rate at least equal to the input transmission rate; and delay means for introducing a predetermined delay for each replicated data stream with respect to the input data stream.

23. Hiltner does not specifically teach a phase delay having a granularity in time units.

However Hiltner does teach (figure 9) a delay line (901) having a propagation length of one time slot (time unit).

24. Pawelski teaches (column 1, lines 25-29) the difference in distance (line delay) creates a phase delay. It would have been obvious to one of ordinary skill in this art to adapt Pawelski's phase delay to Hiltner's system to maintain synchronism or clock recovery in the system.

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25. Regarding claims 24-30, 34-36 and 40, Hiltner teaches (figure 4) the delay means comprising: a memory having N FIFO logical buffers established therein, each logical buffer being associated with on digital data stream of replicated data, wherein when a logical buffer of the N FIFO buffers is full, data blocks associated with the buffer are forwarded to an output port of the N output ports associated the buffer.

26. Regarding claims 33 and 45, Hiltner teaches (figures 1, 4 and 7-9) a digital data stream replicating device for providing data input patterns to a communication device, comprising: an input port for receiving a data stream comprising input data blocks at an input rate; a memory; N output ports having an output transmission rate at least equal to the input transmission rate; processing means connected between the input port and the N output ports, for establishing N FIFO buffers in the memory and associating the blocks with the N buffers so as to replicate the input data blocks, each buffer associated with only one output port; and scheduling means for forwarding data blocks through the corresponding output port when the given buffer is full, providing a delay relating before transmitting the data blocks.

27. Hiltner does not specifically teach a phase delay having a granularity in time units. However Hiltner does teach (figure 9) a delay line (901) having a propagation length of one time slot (time unit).

28. Pawelski teaches (column 1, lines 25-29) the difference in distance (line delay) creates a phase delay. It would have been obvious to one of ordinary skill in this art to adapt Pawelski's phase delay to Hiltmer's system to maintain synchronism or clock recovery in the system.

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29. Regarding claims 23, 39 and 46, Hiltner teaches (figure 4) introducing idle/empty data blocks.

30. Regarding claims 47-49, Hiltner teaches (figure 4) the phase delay (line delay) is determined from a buffer length and the transmission rate.

Allowable Subject Matter

31. Claim 50 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

32. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

33. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

34. Any inquiry concerning the communication or earlier communications from the examiner should be directed to Roberta Stevens whose telephone number is (703) 308-6607.

The examiner can normally be reached on Monday through Friday from 9:00 am to 5:30 p.m.

35. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor can be reached on (703) 308-6602.

36. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is (703) 305-3900.

37. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to: (703) 872-9306

For informal draft communications, please label "PROPOSED" or "DRAFT"

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,

Arlington, VA. Sixth Floor (Receptionist).

Roberta A. Stevens

Patent Examiner

04-13-04



STEVEN NGUYEN
PRIMARY EXAMINER